



### I. Patio Cover Limitations and Requirements

A. Patio covers, as permitted by Chapter 31, Division III of the Appendix to the current edition of the Uniform Building Code, have certain limitations.

1. They are not designed or intended to be used as room additions which require compliance with Code provisions such as waterproofing, heating, and normal live and wind loads. Since patio covers are not necessarily waterproof, the Development Services Department should be consulted regarding any improvements, particularly those pertaining to electrical work.
2. Patio covers, moreover, cannot always be converted to complying room additions. The Development Services Department should be contacted prior to the anticipated conversion to review the proposed work and advise on the legality thereof.

B. Sections 3116 and 3118 of the Appendix to the UBC specify that patio covers are roofed structures and must meet certain requirements. Patio covers:

1. Are one story structures.
2. May not exceed twelve feet in height.
3. Require a minimum distance of six feet eight inches from floor to soffit of supporting member.
4. Are required to have an open area not to be covered with any material except:

- a. Insect screening with mesh not finer than one-sixteenth inch by one-sixteenth inch, or
  - b. Readily removable translucent or transparent flexible plastic not more than one-eighth inch in thickness.
5. May be detached or attached to other buildings as accessories to Group U, Group R, Division 3 or single units in Group R, Division 1 Occupancies.
  6. May be used only for recreational or outdoor living purposes, not as habitable rooms, carports, garages, or storage rooms.
  7. Must meet structural requirements as specified in Sections 3117 and 3119.
  8. Must meet the requirements of Table No. 5-A for wall and opening protection based on location on property for a Group R, Division 3 Occupancy.
  9. May have enclosure walls of any configuration, provided the open area of the longer wall and one additional wall is equal to at least 65 percent of the area below a minimum of six feet eight inches of each wall, measured from the floor.

### II. Examples

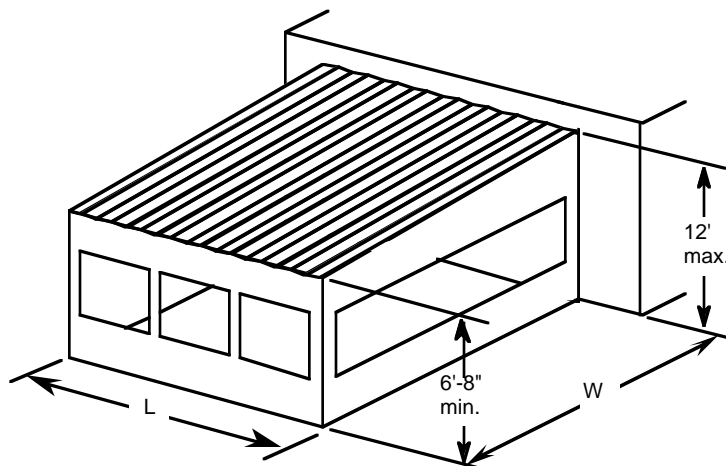
The following examples are intended to show how Chapter 31 of the Appendix to the current UBC applies to typical patio cover layouts.

A. A patio cover with three sides open must have open area provided on the longer side and one other side for a total of not less than 65 percent of the area of its longer side plus one additional side as shown in Figure 1. The height of wall to be used in calculations shall be six feet eight inches. The remaining area may be of solid material and/or sliding glass doors. See Section II, Item F for computation of required open area.

Only insect screening or removable plastic screening is permitted in required open area; sliding glass doors are not permitted in required open areas.

B. A patio cover with two adjacent sides open must have open area provided on the longer side and, if necessary, the shorter side for a total of not less than 65 percent of the area of the longer side plus the shorter side as shown in Figure 2. The height of wall to

Figure 1/Patio cover with three sides open



be used in calculations shall be six feet eight inches. The remaining area may be of solid material and/or sliding glass doors. See Section II, Item F for computation of required open area.

Only insect screening or removable plastic screening is permitted in required open areas; sliding glass doors are not permitted in required open areas.

- C. A patio cover with two opposite sides open must have open area provided on either or both of the open sides for a total of not less than 65 percent of the area of side "L" plus side "W" as shown in Figure 3. The height of wall to be used in calculations shall be six feet eight inches. The remaining area may be of solid material and/or sliding glass doors. See Section II, Item F for computation of required open area.

Only insect screening or removable plastic screening is permitted in required open areas; sliding glass doors are not permitted in required open areas.

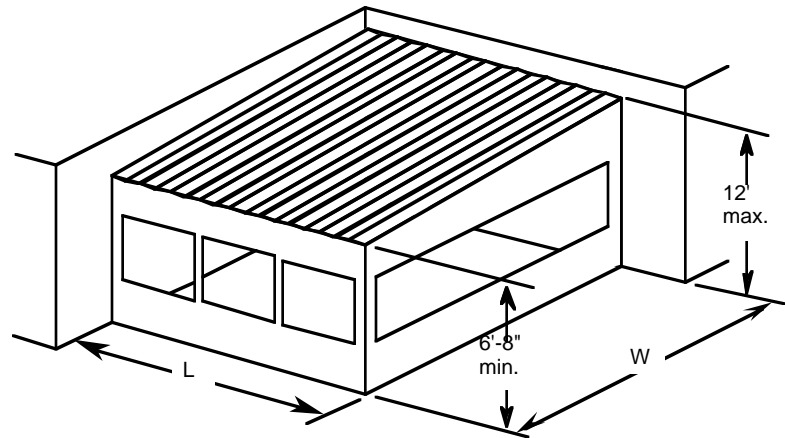
- D. A patio cover with one side open must have open area provided on side "L" equal to at least 65 percent of the area of side "L" plus side "W" as shown in Figure 4. The height of wall to be used in calculations shall be six feet eight inches. The remaining area may be solid material and/or sliding glass doors. See Section II, Item F for computation of required open area.

Only insect screening or removable plastic screening is permitted in required open areas; sliding glass doors are not permitted in required open areas.

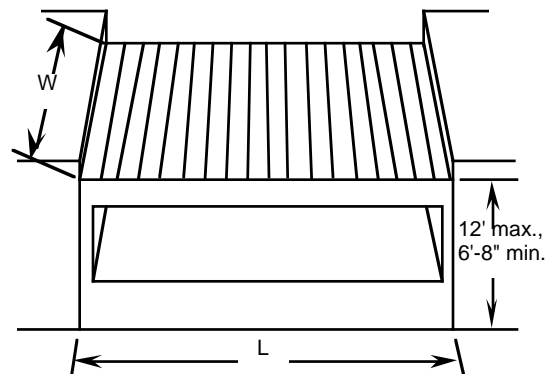
- E. A patio cover with one side and a portion of a second side open must have open area provided on side "L" and side "R" equal to at least 65 percent of the area of side "W" plus side "L" as shown in Figure 5. The height of wall to be used in calculations shall be six feet eight inches. The remaining area may be of solid material and/or sliding glass doors. See Section II, Item F for computation of required open area.

Only insect screening or removable plastic screening is permitted in required open areas; sliding glass doors are not permitted in required open areas.

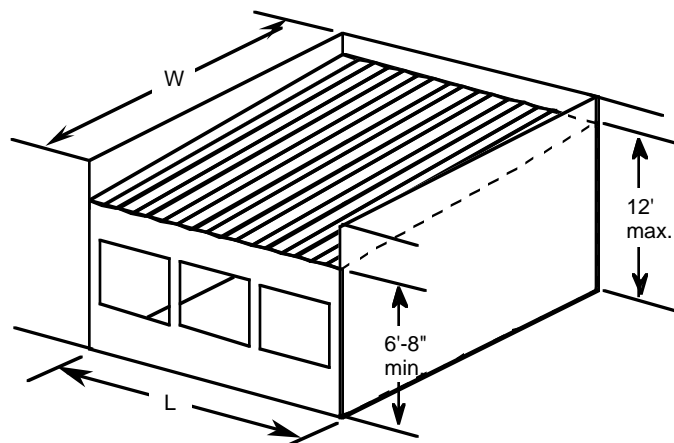
**Figure 2/Patio cover with two adjacent sides open**



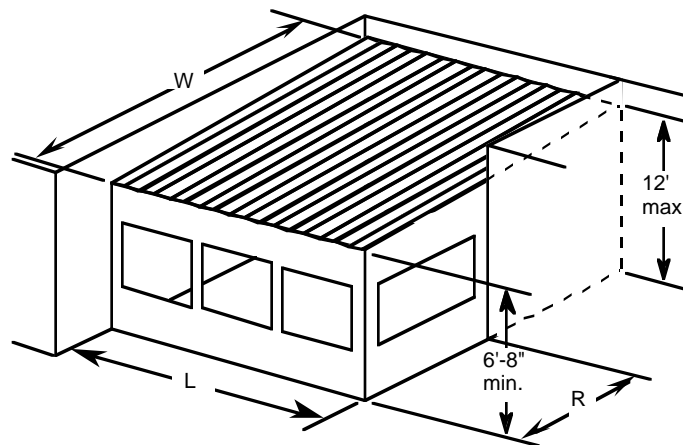
**Figure 3/Patio cover with two opposite sides open**



**Figure 4/Patio cover with one side open**



**Figure 5/Patio cover with one side and a portion of a second side open**



F. Figure 6 illustrates computation of open area for a patio cover.

*Question:*

Does the patio cover shown in Figure 6 have sufficient open area?

*Answer:*

Required open area:

= 65% of 15' and 20' walls for a height of 6'-8" (even though wall exceeds this 6'-8" minimum height)

$$= 0.65 \times (20' + 15') \times (6.66')$$

= 152 sq. ft. required

Open area of longer side:

$$= 70 \text{ in.} \times 1/_{19} \times (20-6-1-1) \text{ ft.}$$

= 70 sq. ft.

***Note: Area of sliding glass door is not included.***

Open area of shorter side:

$$= 70 \text{ in.} \times \frac{1}{12} \times (15 - \frac{1}{2} - \frac{1}{2}) \text{ ft.}$$

= 82 sq. ft.

Total open area provided:

$$= 70 \text{ sq. ft.} + 82 \text{ sq. ft.}$$

= 152 sq. ft.

Required open space is 152 sq. ft.; therefore, sufficient open area is provided.

### Figure 6/Example

